

Appl. No. 10/646,930  
Amdt. Dated December 11, 2006  
Reply to Office action of August 18, 2006

### **REMARKS/ARGUMENTS**

The applicant has concurrently filed a Request for Continued Examination and a request for a one-month extension of time. Accordingly, the applicant respectfully submits that this Response is timely filed. Please charge our deposit account number 02-2095 in the amount of \$910.00, which comprises the extension of time fee (\$120.00) and the RCE fee (\$790.00). Please also charge any additional fees that may be required, or credit any overpayment, to our deposit account.

Concurrently with the filing of this Response and Request for Continued Examination, the applicant has filed a request for an interview. The applicant has requested the Examiner to contact the applicant in advance of issuing a first Office Action during the prosecution of this RCE.

This letter is responsive to the Office Action dated August 18, 2006.

In the Office Action, the Examiner rejected claims 1-3, 5-11, 13-16, 31-33 and 35-44 under 35 U.S.C. 102(b) as being anticipated by Baker. The Examiner stated that Baker discloses an explosive comprising "ammonium nitrate of 68%, carbonatious fuel of 5.25% and an epoxidized soy bean oil of 3%". Accordingly, the Examiner stated that the composition of Baker meets all the limitations of claim 1.

By this Response, the applicant has amended claim 1 to specify that the ANFO explosive composition comprises "as essentially the only active explosive agents a mixture of inorganic oxidizer particles comprising ammonium nitrate particles and an organic combustible fuel". As noted in Hawley's Condensed Chemical Dictionary, 11<sup>th</sup> edition, page 503 that are attached, ANFO explosives comprise 94% ammonium nitrate prills and 6% fuel oil. This is the same range that is referred to in the specification by the applicant. In addition, in new claim 47, the applicant specifies that the explosive

composition comprises inorganic oxidizer particles and the organic combustible fuel that are present in a weight ratio of 94 to 6 and the chemical coupling agent is selected from the group consisting of an epoxidized oil, an ester derivative of epoxidized oil, and mixtures thereof.

In contrast, Baker relates to dynamite. As noted by the Examiner, the composition of Baker comprises 65% ammonium nitrate (68 minus 3), 5.25% carbonatious fuel and 3% epoxidized soy bean oil. If all these ingredients are combined together, then this accounts for 73.25% of the explosive composition. A substantial additional amount of material is required to form the composition of Baker. In particular, as noted in the table referred to by the Examiner in column 8 of Baker, the formulation includes 19 weight % of nitrate esters. As noted in claim 1 of Baker, the dynamite composition comprises at least nitrate esters, oxidizers salts and carbonatious fuel. Accordingly, the explosive composition claimed in claim 1 is different to that of Baker et al. In particular, the definition of the explosive composition of claim 1, specifies that "a mixture of inorganic oxidizer particles comprising ammonium nitrate particles and an organic combustible fuel" are "essentially the only active explosive agents" and this excludes substantial amounts of nitrate esters that are present in the dynamite composition of Baker. Accordingly, the applicant respectfully submits that claim 1, and the claims dependent thereon, are not anticipated by Baker.

The Examiner also rejected claim 37 in view of Baker. Claim 37 specified that the method of claim 31 required combining the organic combustible fuel and the chemical coupling agent to form a liquid mixture. This liquid mixture was then combined with the ammonium nitrate particles to produce the ANFO explosive composition. In the detailed action, the Examiner has not explained how these limitations are anticipated by Baker.

By this Response, the applicant has cancelled claim 37 and inserted the limitations into claim 31. In addition, the applicant has amended claim 31 to be directed at a method for reducing oil segregation in an ANFO explosive composition. Pursuant to the method of claim 31, the organic combustible fuel and the chemical coupling agent are combined to produce a liquid mixture. This liquid mixture is then combined with the inorganic oxidizer particles to produce the ANFO explosive composition.

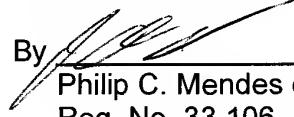
The applicant notes that at column 7, lines 26-29, Baker states as follows:

"The desensitizers of the present invention are incorporated into dynamite by blending the desensitizer into the NG. The desensitized NG is then made into dynamite in the normal manner."

The applicant has specified in claim 31 that the organic combustible fuel is "an ANFO explosive suitable organic combustible fuel". The combustible fuels that are suitable for use in an ANFO explosive composition are well known in the art. In particular, it is known in the art that nitroglycerin is not utilized in the organic combustible fuel of an ANFO explosive composition. In addition, the applicant has inserted new claims 48 and 49 that relate to the composition of the organic combustible fuel. In particular, for example, referring to claim 49, it is specified that the process includes selecting diesel fuel as the organic combustible fuel. As referred to in the excerpt from Baker previously, the desensitizer of Baker is first blended with nitroglycerin. Baker does not refer to the nitroglycerin as including other materials, such as diesel fuel. Further, nitroglycerin is not a conventional fuel that is used as the fuel oil in an ANFO explosive composition. Accordingly, the applicant respectfully submits that claim 31, and the claims dependent thereon, are not anticipated by Baker.

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In view of the forgoing, favourable consideration of the application with a view to allowance is respectfully requested.

Respectfully submitted,  
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